



UNIVERSITY OF EDUCATION, WINNEBA  
 INSTITUTE FOR TEACHER EDUCATION AND  
 CONTINUING PROFESSIONAL DEVELOPMENT  
 (ITECPD)



END-OF-SECOND-SEMESTER EXAMINATIONS. JAN., 2023

LEVEL 200

COURSE CODE: JBT 242

COURSE TITLE: APPLICATION DEVELOPMENT IN EDUCATION

TIME ALLOWED: 50 MINUTES

STUDENT'S INDEX NUMBER:

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GENERAL INSTRUCTIONS:

- This paper is made up of ONE SECTION.
- Section B is made up of four essay type questions.
- Answer TWO questions into your answer booklet.
- Each question carries equal marks. You are expected to start each question on a new page.
- You are expected to handover your answer booklet to the invigilator before you leave the examination hall.

SECTION B

- Draw a flow chart to compute the radius of a circle. Derive your formula from the given equation:  $A = \pi r^2$ , then display the output. [6 marks]
  - Define the following: [2 marks]
    - A Class [2 marks]
    - An Object?
- In not less than five (5) stages, discuss the SDLC. [10 marks]
- Write an algorithm to receive two numbers from a user, sum and output the result. [5 marks]
  - Write the C++ code for the algorithm in 3a. above. [5 marks]
- Define the following terms: [2 marks]
    - Encapsulation [2 marks]
    - Polymorphism
  - What is the difference between variables and constants? [4 marks]
  - What is an IDE? [2 marks]

Handwritten notes: Planning, Requirement Analysis, Design, Implementation and development, Test and deployment, Maintenance